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SECOND ANNUAL REPORT

OF THE

MARYLAND AGRICULTURAL EXTENSION SERVICE

FOR THE

YEAR ENDING JUNE 30, 1916

MARYLAND AGRICULTURAL COLLEGE, AND U. S. DEPARTMENT
OF AGRICULTURE COOPERATING

THE MARYLAND AGRICULTURAL EXTENSION SERVICE

OF

THE MARYLAND STATE COLLEGE OF AGRICULTURE

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*COUNTY DEMONSTRATION AGENTS.

Allegany—John McGill, Jr.
Anne Arundel—H. C. Whiteford.
Baltimre—J. F. Hudson.
Calvert—John H. Drury.
Caroline—Alvah J. Norman.
Carroll—Grover Kinzy.
Cecil—D. H. Kaufman.
Charles—R. L. Clute.
Dorchester—G. B. Porter.
Frederick—P. A. Hauver.
Garrett—A. G. Middleton.
Harford—T. E. McLaughlin.
Howard—J. L. Fidler.
Kent—L. L. Burrell.
Montgomery—F. J. Van Hoesen.
Queen Anne—Oliver C. Jones.
Prince George—C. H. Taylor.
St. Mary's—G. F. Wathen.
Somerset—C. Z. Keller.
Talbot—E. P. Walls.
Washington—T. L. Smith.
Wicomico—W. C. Vail.
Worcester—J. F. Monroe.

*HOME DEMONSTRATION AGENTS.

Allegany—Mrs. Leona H. Powell.
Anne Arundel—Miss M. R. Brady.
Calvert—Louise Comstock.
Caroline—Alma Merwin.
Charles—Miss Charlotte Poole.
Dorchester—Elva Akin.
Frederick—Miss Emily Ebner.
Garrett—Frances Gerber.
Harford—Miss F. E. Saville.
Kent—Miss Helen Comstock.
Prince George—Miss Susan F. Ward.
St. Mary's—Miss Lillian Mattingly.
Talbot—Mrs. Olive K. Walls.
Washington—Miss A. S. Jones.

*In cooperation with U. S. Dept. of Agriculture.
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LETTER OF TRANSMITTAL

To His Excellency, Emerson C. Harrington,
Governor of Maryland:

In accordance with the requirements of the Act of Congress, approved May 8, 1914, and known as the Smith-Lever Act, I have the honor to submit herewith Report on the work of the Agricultural Extension Service of the Maryland State College, in cooperation with the U. S. Department of Agriculture, for the fiscal year ending June 30, 1916.

Respectfully submitted,

THOMAS B. SYMONS,
Director Extension Service.

College Park, Md.,
January, 1917.

SECOND ANNUAL REPORT

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Maryland Agricultural Extension Service

FOR THE YEAR ENDING JUNE 30, 1916

By THOMAS B. SYMONS, *Director.*

The aim of the Extension Service is to carry information to the farmers of the State through practical demonstrations on their farms, in increased production of farm and truck crops, in more and better live stock, in proper methods of marketing and distribution of farm products, in organization for educational and social purposes, and in adopting better business methods in the conduct of the farm, so as to improve country life conditions and develop the agricultural resources of the State. To aid the home-makers on our farms in all phases of practical home economics for better and more comfortable and satisfied country living. To develop an increased interest and more thorough appreciation of the pursuit of agriculture among our farm boys and girls. Finally, the Service aims to demonstrate facts, increase incomes and make more happy homes in Maryland.

A general report upon the activities of the Extension Service during the past fiscal year is given under the general divisions of the work and approved projects.

ADMINISTRATION.

No marked changes in the Extension organization have been effected. The policy advocated in my previous report of employing whole-time men only as specialists in the different lines of work, has been adopted under State and Federal Smith-Lever Funds. Relations with the other divisions of the Institution, Resident Instruction and Research, have been all that the Service could expect. In fact, it has been largely due to the co-operation of these Divisions of the Institution that the Extension Service has been enabled to make the progress which has marked the past year's work. Since submitting my last Annual Report, a reorganization of the Institution has been affected to the extent of securing a new charter and changing the name of the Institution—making it wholly a State Institution.

There has also been a change in the composition of the Board of Control or Trustees by forming a State Board of Agriculture, which is also the Board of Trustees of the College. By legislation this Board has charge of all agricultural activities in the State, and all

work can be co-ordinated, so as to eliminate any friction or duplication that may develop in having two distinct Boards. The relations of the State Department of Public Instruction and the Extension Service are cordial and co-operative. The specialists and county agents receive the co-operation of the public school teachers in the boys' and girls' work, and an effort is being made to more thoroughly co-ordinate our work with agricultural instruction in the public schools of the State. Many teachers of agriculture in high schools aided in the club work during the summer.

The Farmers' Institute Work continues to be conducted independent of the Extension Service, but every effort is made to co-operate in the work. The county agents, as well as specialists, aid where possible in promoting Institute meetings.

Source of Extension Revenue.

Conditions regarding State revenue for the Service have been greatly improved through appropriations by the 1916 Legislature. These appropriations were available October 1st, 1916.

During the fiscal year ending June 30, there was available, $17,746.73 from Federal Smith-Lever funds, $22,320 from the U. S. Department of Agriculture, $7,640.38 from the State Smith-Lever funds, and $11,050 from county organizations, or a total of $59,757.11 devoted to extension work by the Service and Department of Agriculture.

During the present fiscal year ending June 30, 1917—there is available $24,202.34 from Smith-Lever Fund, $14,202.34 from State Smith-Lever Fund, $20,400 from U. S. Department of Agriculture, $21,-054.11 County Appropriation, $5,000 State Fund for general extension work and about $2,000 from the State Horticultural Fund, or a total of $86,858.79 that is being used for extension and demonstration work.

The State appropriation of $1,000 for each county, or $23,000 for the salaries of county demonstration agents, not only insures a man agent in each county, with possible assistance for women agents in some counties, but it gives stability to the work that is not insured by dependence upon County Boards for the funds. So far as I know, this is the only State in the Union where $2,000 is provided for county men agents in each of its counties. It is not to be construed that this appropriation entirely precludes the county from participation in the expense of the work. Several counties are utilizing available funds for increasing the efficiency of the agents by providing expenses, equipment, etc. It is desired to retain such financial touch with the county administrations. The only restriction regarding this appropriation is that the allotted sum of $1,000 must be spent for this purpose in the respective counties or returned to the State Treasury. No other restrictions are placed upon the State appropriations.

Office Accommodations, Equipment, Etc.

Owing to the fire at the Institution some time since, and inability to provide additional buildings for the past two years, office accommodations for the Service have been inadequate and workers have been compelled to put up with crowded conditions, being located in different buildings at the Institution. Recently, however, it has been possible to lease a building 108 x 25 feet for the entire use of the Extension Workers, which will relieve the situation immensely until the New Agricultural Building, shortly to be erected, is ready for occupancy. This leased building is near the railroad station and, accordingly, very convenient for Extension Workers. Owing to the transfer of offices, much new office equipment has been required. Also, during the year, additional equipment in the form of slides, lanterns, and other illustrative material has been secured. The county agents have been supplied with an equipment for demonstration purposes, in the prevention of hog cholera and also scales for use in boys' club work. A limited number of books have been secured for the specialists. Much additional equipment is now needed by all workers in the Service. It is also hoped to establish a circuit of moving-pictures for educational purposes.

Changes in Personnel.

Few changes in personnel have been made. Miss Florence J. Hunt and Miss Kathleen Calkins, assistants in Home Economics, resigned in July and August to accept other positions. Miss Venia M. Kellar was appointed to one of these vacancies December 1st, 1916. Mr. H. S. Koehler, county agent, Queen Anne's County resigned last February to accept another position; Mr. E. A. White was appointed to this vacancy. County Agent G. F. Marsh resigned October 1st, and D. H. Kauffman has been appointed in his place. Dr. S. S. Buckley was appointed specialist in Animal Industry, May 15th, 1916. Mr. Nickolas Schmitz withdrew from Extension Service, November 1st, and Mr. W. B. Kemp has been appointed to this vacancy. Six additional county agents have been appointed during the year—L. L. Burrell, Kent County; A. J. Norman, Caroline County; W. C. Vail, Wicomico County; Fred J. Van Hoeson, Montgomery County; T. E. McLaughlin, Harford County; Grover Kinzy, Carroll County. There have also been some changes of clerks in the office. L. A. Martin was appointed, last May, to conduct work among the negro farmers in the Southern counties of the Eastern Shore and elsewhere in the State. His headquarters are at Princess Anne Academy, Princess Anne, Md.

In conclusion, under this heading, it may be stated that the conditions under which the Extension work has been administered during

the past year have been exceedingly trying and difficult. It is hoped with the approach of the new year these conditions will be greatly improved.

Publications.

On account of the lack of funds during the past fiscal year only a limited amount was available for printing and distribution of publications. The "Farm Adviser," a bi-monthly publication, has been published regularly to give the public and press of the State timely news items concerning the work of the Service and other information. A total of *30,000* copies have been issued. 5,000 copies of my last Annual Report were published; also two Extension Bulletins, entitled "The Maryland Apple Grading and Packing Law" (5,000 copies), and "The Relation of Lime to Agriculture" (5,000 copies). One column of plate matter has been furnished weekly to about 100 newspapers in the State, the cost of issuing same being provided from other funds.

Much other circular matter in the form of multigraph and neostyle work, together with a large quantity of bulletins and miscellaneous matter from the College and U. S. Department of Agriculture, to the amount of about 50,000 pieces, have been distributed.

The regular mailing list to farmers of the State contains about 24,000 names, but we have not had sufficient funds to send our publications to the entire list. We have managed to send our publications to lists of organized farmers of the State. Arrangements are now being made to more effectively care for general publicity of the Service. Additional bulletins are being prepared.

County Demonstration Work.

This project is supported by State and Federal funds, and provides for carrying out all project demonstration work through men county agents. There are now eighteen county agents at work in the State. Agents will be selected for the remaining five counties before next season's work begins, as funds are now available. It is believed, on the whole, that we have an unusually strong force of agents. There is, however, much room for improvement in the co-ordination of their work with the specialists of the Service and the Institution. It is hoped that very definite plans can be made for the next agents' conference so that a thorough understanding can be had as to the results to be expected from a season's work. The primary duty of the agent is to conduct well-planned demonstrations in the major industries of the county, so as to demonstrate the results of improved methods of culture and treatment of the crops, also in the feeding and handling of live stock. It is not sufficient for the agents to give advice to farmers; the agent must be able to show farmers the results of the advice given. The great mass of farmers in many sections still feel that it is too expensive to follow the advice of experts or agents. Demonstra-

tions carefully followed out under the individual farmer's conditions are the surest way of obliterating this prejudice. The county agent must avoid having too many irons in the fire, so to speak. Their work must be systematized and organized for definite results.

From the reports of the State Agent, Mr. G. H. Alford, and county agents, giving in detail the progress and results of their work during the past year, the following summary of demonstrations and miscellaneous work is taken:

CROP.	*No. Demonstrations.*	*Average Yield Per Acre.*	
Corn	214	36 3/22	Bushels
Wheat	168	22.1	"
Tobacco	36	1212.5	Pounds
Oats	35	39.5	Bushels
Rye	78	27.33	"
Buckwheat	3	32.	"
Barley	2	40.	"
Mixed Grasses	79	3.25	Tons
Soy Beans	106	Hay 3½	"
		Grain 16.36	Bushels
Alfalfa	200	4¾	Tons
Crimson Clover	126	1.88	"
Red Clover	15	2.	"
Cow Peas	137	Seed 15.	Bushels
		Hay 2.	Tons
Sweet Potatoes	5	200.	Bushels
Irish Potatoes	43	165.	"
Tomatoes	32	5½	Tons

ORCHARDS: 390. Instructed in the culture of 220,034 trees.

HORSES: 14 pure bred stallions and 6 pure bred jacks were purchased through the influence of the County Agents.

DAIRY CATTLE: 84 pure bred bulls and 205 registered heifers were brought into the State as a result of the activities of the Agents.

BEEF CATTLE: 107 pure bred bulls and 25 pure bred heifers have been brought in through the County Agents' influence.

HOGS: 126 pure bred boars and gilts have been purchased by demonstrators.

SHEEP: 24 pure bred rams and 183 registered ewes have been purchased as the result of the County Agents' influence.

POULTRY: 2,990 chickens, 750 turkeys, 75 ducks, 25 guineas, and 100 geese have been cared for according to methods advocated by the County Agents.

LIVE STOCK DISEASES AND PESTS:	5,446	head of live stock have been treated for diseases or pests at the suggestion of County Agents and Specialists.
FERTILIZERS:	184	farmers compounded fertilizer and 111 farmers top dressed crops at the suggestion of the County Agents.
MANURE:	601	farmers carried out the suggestions of County Agents relative to the better care and handling of the manure. The agents helped to place 187 manure spreaders on demonstration farms.
SILOS:	139	silos were built under the direction of the County Agents.
LIME:	1,616	FARMERS HAVE used 29,425 tons of lime under the direction of County Agents.
ORGANIZATION:	44	farmers' clubs have been perfected by the County Agents during the year.

1.	Number of visits to farmers by county agents	12,808
2.	Number of miles traveled by county agents	100,499
3.	Calls on agents relative to work at office or home	5,564
	Personal telephone	3,460
4.	Number of farmers' meetings held under auspices of agents	304
5.	Number of meetings addressed by county agents	1,107
6.	Total attendance at such meetings	32,467
7.	Number of field meetings held	643
8.	Total attendance at these meetings	3,027
9.	Number of official letters written	11,718
10.	Number of circular letters prepared and distributed	11,119
11.	Number of articles relating to work published	437
12.	Number of bulletins of the State and U. S. Department of Agriculture distributed	8,341

The State Agent summarizes his personal work as follows:

Meetings held	47
Number of visits to county agents	57
Number of demonstration farms visited	53
Number of miles traveled by rail	8,000
Number of miles traveled otherwise	2,631
Number of letters dictated	1,345
Number of circular letters prepared	52
Number of conferences held	120
Special addresses prepared	8

With a strong agent in each county of the State next year, and with a thorough co-ordination of the work of the Service, much greater results should be secured.

The following county agents have been at work in the respective counties of the State: Messrs. L. L. Burrell, Kent County; John H.

Drury, Calvert County; J. F. Hudson, Baltimore County, W. R. Linthicum, Charles County; H. S. Lippincott, Somerset County; John McGill, Jr., Alleghany County; John F. Monroe, Worcester County; A. J. Norman, Caroline County; Gilbert B. Porter, Dorchester County; W. C. Vail, Wicomico County; Fred J. Van Hoeson; Montgomery County; E. P. Walls, Talbot County; G. F. Wathen, St. Mary's County; E. P. White, Queen Anne County; H. C. Whiteford, Anne Arundel County; T. E. McLaughlin, Harford County; Grover Kinzy, Carroll County; D. H. Kauffman, Cecil County.

Boys' Club Work.

This project is supported by Federal and State Smith-Lever funds. Mr. Reuben Brigham is in charge of this work and reports splendid progress during the past year. Boys' work has been conducted in all counties of the State with the exception of Howard and Garrett counties. In these counties, under the stimulus of the Home State Tour, special competitions were held, which resulted in arousing the enthusiastic interest of the local people in having the work established on an extensive basis in 1917. In those counties where no county agents were employed, co-operation was effected with good results with the local School Boards, by the summer employment of agricultural teachers. It is believed that thorough co-operation with the established State agencies, such as the State and County School Boards, along well-defined lines, is desirable for placing the work upon a permanent and proper basis.

Home State Tour.

As a result of bringing the prize-winners in the Boys' Club Work to "Maryland Week" in 1916, the management of the *Baltimore Sun* became greatly interested in the Boys' and Girls' Work and suggested, through Mr. Henry Edward Warner, that the prize-winning boys be taken on a tour throughout the State. The plan of the tour was that the Western Maryland boys be taken through the Eastern Shore and the Eastern Shore boys be taken through Western Maryland; both parties arriving in Baltimore during "Maryland Week." The idea being educational in familiarizing the boys with the varying conditions, and the agricultural and industrial development in the State.

The tour was made in automobiles furnished by local citizens in each section visited. The Home State Tour aroused a keen interest in Boys' Work, from the start, on the part of both the rural and town people of the State. In the sections visited by the prize-winners, the element of personal hospitality which entered into the scheme has created a feeling of individual and collective interest in the work, which could not have been obtained in any other way. The general effect of the tour on the work during the coming year, Mr. Brigham

reports, can only be judged from the prospects for a much increased enrollment reported by county agents, particularly in those counties that were weak in club work during the past year, and in which there seemed a very lukewarm response to the opportunities opened to the country boy through club work. The Extension Service is indebted to the *Baltimore Sun* and the many public-spirited citizens in all parts of the State for their earnest co-operation in making the tour such a success. There has not been a public enterprise of this character that so thoroughly involved the great majority of the best citizens of Maryland in its support, and which demonstrated the hospitality and community pride of our citizens. Of its effect on Club Work, and its influence in bringing the people of the State to a full appreciation of the importance of encouraging the Maryland country boy in agricultural pursuits, too much cannot be stated. The tour not only served to acquaint the people with Club Work, but it also brought to the front the work that is being done by the agricultural agencies in the State.

Enrollment, Yields, Etc.

The enrollment of boys in Club Work this year was three times the number engaged last year. A total of 513 boys have been interested and enrolled in the work. While the principal Club Work the past year has been in raising corn and potatoes, pig, poultry, and apple clubs will be fostered the coming year.

There has been a decided improvement in the matter of yields of corn and keeping of records over last year. Several yields this year exceeded 100 bushels, same being absolutely verified by a representative of the Service. The general sentiment among the agents where the work was carried out carefully and with exactness, is strongly in favor of thorough supervision of the work and the measuring of yields. The highest yield was made by Thomas Bonwill, of Kent County, his yield being 118 bushels of corn per acre, the State championship, however, going to J. Earl Smith, of Queen Anne County, who grew 110.5 bushels at a cost of 18½ cents. Governor Harrington presented Mr. Smith with a handsome gold watch.

Agricultural Clubs.

As suggested last year an effort has been made to form local agricultural clubs with the result that between twenty-five and thirty were organized during the winter and spring. Naturally some of these clubs failed to survive, but the large majority are still in a healthy condition.

This type of Boys' Club activity has been especially helpful to the work in counties without an agent and in arousing a spirit of neighborhood co-operation and community interest.

Mr. R. F. McHenry, who was appointed assistant under this project, has aided in this phase of the work, in a very satisfactory manner, as

well as the routine work of the project. Over $1,600 was offered in prizes for Boys' Club Work in the counties, exclusive of the funds raised to finance the Home State Tour and the State prizes offered in the Corn and Potato Club Competitions.

Mr. Brigham reports a summary of the Boys' Club Work as follows:

Number meetings held	108
Attendance at meetings	7,516
Visits to county agents	43
Visits to demonstration farms	76
Number miles traveled	9,973
Total number boys enrolled in Corn Clubs	513
Total number boys reporting Corn Clubs	217
Total number bushels corn	12,584
Total cost	$4,056.67
Average cost per bushel	.35
Average number of bushels per acre	60.5
Total number boys enrolled in Potato Clubs	137
Total number reporting	57
Total number of bushels reported	1,388
Total cost	$385
Average cost per bushel	.32
Average number of bushels per acre	194.64

The Highest Yields (Revised).

Name.	*Town.*	*County.*	*Yield.*
Thomas Bonwill	Still Pond	Kent	118.4 Bushels.
Carlton Neal	Cambridge	Dorchester	113.1 "
J. Earl Smith	Chestertown	Queen Anne	110.5 "
Hopper T. Cosden	Longwoods	Talbot	106.4 "
Reese F. Cropper	Berlin	Worcester	97. "
Jack Mason	Worton	Kent	96. "
Samuel Seney, Jr.	Centerville	Queen Anne	94.6 "
J. A. Irving	Rising Sun	Cecil	94.5 "
Osborne Reynolds	Childs	Cecil	94. "
J. Medford Price	Centerville	Queen Anne	93.6 "

Home Demonstration and Girls' Club Work.

This project is supported by Federal and State Funds. Miss Katharine A. Pritchett, State Home Demonstration Agent, reports that satisfactory progress has marked the Home Demonstration and Girls' Club Work in the State during the past year. Too much importance cannot be attached to the need of aiding our farm women and girls in the various phases of practical home economics. While good progress has been made in this work, we have not been able to place the county women agents on the substantial basis that we desire. Miss Florence J. Hunt, assistant, resigned June, 1916, to accept a position in Illinois; also Miss Kathleen Calkins, who was em-

ployed last March, resigned in July to accept a position in New Hampshire. Miss Venia Kellar has recently been appointed to one of these vacancies.

Women County Agents.

Ten county agents have been employed in home economics work during the past year. Four of the agents are employed on a twelve-months' basis; two a nine-months' basis and the remainder upon a six-months' basis. While those engaged for half the year do good work, yet it is just as necessary and important to have the women agents employed by the year as the men. We have been fortunate in securing, on the whole, a well-trained group of agents. We have not been in a position to pay the salaries or furnish the expenses that are necessary and desirable for the work. A high type of work is demanded in the State and the agents should be well trained in order to be prepared to meet the demand of giving information and conducting demonstrations in the many phases of home economics. The work among the rural women in this State must cover all phases of home economics. Some community wants are quite different from others, and the work must be so planned as to suit the needs and meet the requirements of all sections.

Local financial aid has been raised through the County School Boards, except in two cases where private parties offered to support the work. Through the school boards and county superintendents the work has thus been closely associated with the public schools. The rural schools in many cases have been used for meetings and demonstrations by the girls' clubs and by this means the agents have worked with the girls in their homes and co-operated with the teachers in community work. Parents are encouraged to open their homes to the girls' clubs so that the girls may use the kitchen as the laboratory.

Miss Pritchett reports 1,472 girls enrolled in clubs for the purpose of studying home demonstration work. About 300 of these girls are pursuing, successfully, three distinct activities. The interest in the girls' work has been enhanced by a better knowledge and understanding of the work required and accomplished, and also by the trip to Baltimore, given the fourteen prize-winners of 1916 during "Maryland Week." The work attained a much higher standard this year than last.

During the spring and summer of 1916, Miss Pritchett reports that many individual girls canned from 350 to 450 containers, compared with 50 to 150 containers last year. Gardening work was much more successful this year. Demonstrations in making bread have been popular in many counties; while sewing, poultry work, cooking and use of labor-saving devices have been conducted in different sections.

One practice has been to develop that phase of home economics

which is of especial interest to the community. Especially good work has been done in Dorchester and Frederick counties. Very systematic work has been carried on in each club and some fine community meetings were the outgrowth of the Girls' Club Work.

Through co-operation of the Service with the *Baltimore Sun*, the Mayor and many business men of Baltimore, three prize-winning girls from each of the ten counties were given a trip to Baltimore, Washington and Annapolis. The girls and the boys of the Home State Tour took this trip together. In each city the girls were entertained by mothers of the Women's Federation, the Women's Civic League and the Mothers' Congress of Washington. This trip proved very successful and served not only as a further incentive to the girls, but aroused the people of the State to the importance of the girls' work. It is our desire, however, that prizes to girls as well as boys should be educational and serve a higher aim than simply visits to certain places of general interest.

Exhibit.

The Girls' Home Demonstration Booth at the "Maryland Week" Exhibition attracted much attention. Thirty-five containers from each of the ten counties were exhibited; also Ruth Darner's 100 varieties, and Frances Royer's individual exhibit, sewing, record books and story books were on display. Prizes were awarded the winning girls on the occasion of Boys' and Girls' Club Night at the Armory.

Women's Work.

Three hundred and seventy-three women have organized for definite systematic study. There are constant demands from the women for home economics and demonstrations. During the year nine movable schools have been held. Many demonstrations have been given at women's meetings and a short course of one week was given the summer school teachers of Garrett County. A short course was also given at the College. There have been many calls for assistance by women's clubs that the Department has been unable to meet. The policy has been to devote our principal energy to assisting farm women and organizing rural communities.

Miss Pritchett reports a summary of the Home Economics work as follows:

Number of county agents employed	10
Number of miles traveled by State agent and assts	13,361
Number visits to county agents	65
Meetings attended and lectures given by State agent and assistants	82
Number of demonstrations given	38
Total attendance at above meetings and demonstrations	11,936
Total number girls enrolled in clubs	1,472

Number of girls completing work assigned	970
Total number containers of fruits, vegetables, canned and preserved	13,639
Number aprons, caps, dresses, towels and pieces of sewing completed by girls	2,156
Number clubs holding meetings throughout the year	709
Total attendance at these meetings	15,051
Number demonstrations given by agents in homes and meetings	207
Total attendance at demonstrations	2,334
Number labor saving devices located in homes	141

The following agents have been employed in the respective counties: Miss F. E. Saville, Harford County; Miss Lillian Mattingly, St. Mary's County; Miss M. Luckett Iglehart, Anne Arundel County; Miss Venia M. Kellar, Dorchester County; Mrs. Leona H. Powell, Alleghany County; Miss Charlotte Poole, Charles County; Miss Emily Ebner, Frederick County; Miss Helen L. Comstock, Kent County; Mrs. Olive K. Walls, Talbot County; Mrs. M. L. Hennaman, Prince George County.

Agronomy Extension Work.

This project is supported by Federal and State Funds. Mr. Nickolas Schmitz, specialist, in charge devoted part time to the work. He withdrew from Extension Work, November 1st. Mr. W. B. Kemp was appointed Extension Agronomist, November 20, 1916.

An extended account of the demonstration work in agronomy is given in my previous annual report. The work has been continued during the past year along similiar lines. Splendid results have been secured in the corn, wheat, alfalfa and soy bean demonstrations. The introduction of sudan grass has proven a useful forage crop in many sections. This crop is not as yet being raised extensively.

The exhibits of corn at the various local exhibits and fairs in the counties, as well as at the "Maryland Week" Exhibition, were the best ever displayed in the State, which shows the results of demonstration and educational work in proper selection of seed corn. Professor Schmitz reports the following number of demonstrations conducted with the different crops in the State:

Number Wheat Demonstrations	25
Number Alfalfa Demonstrations	74
Number Soy-bean Demonstrations	64
Number Sudan Grass Demonstrations	26

In addition, much personal advice has been given regarding the growing of crops as well as rotations and general farm work. Professor Schmitz reports having visited 74 farms with county agents for the purpose of advising and planning alfalfa demonstrations. He visited 36 wheat demonstrations and 15 soy-bean demonstrations. He made 10 addresses at farmers' meetings and attended 10 grain shows

arranged by the county agents, for the purpose of judging the exhibits of farm products and addressing these meetings or demonstrating the methods of judging. In all cases the county agent has been instructed to get details as to yields and general behavior of the crops in the demonstrations.

Animal Industry Extension Work.

May 1, 1916, Dr. S. S. Buckley was appointed as Animal Industry Specialist to devote whole time to the work. The project is supported by State and Federal Funds. Dr. Buckley reports in part as follows:

The project provides for the promotion, extension and improvement of all classes of live stock in Maryland, except dairy animals, this class being taken care of by another project. There is a fertile field in this State for developing our animal industry. While dairying is predominant, there is abundant opportunity for developing the swine and sheep industry, as well as beef cattle. It is recognized that before farmers will be willing to undertake a great extension of their live stock interests, they must be assured that there are reasonable hopes for protecting themselves against disease losses, particularly those of contagious and infectious type. Especial effort, therefore, is being made in an educational and demonstrational way toward the avoidance and control of hog cholera infections, abortion and tuberculosis in hogs and cattle. Extension work along this line will harmonize with and serve as a material aid in the regulatory work of live stock sanitary control. Furthermore, extension work of this character will tend to create a spirit of mutual interest on the part of sanitary officials and farmers, whereas at present, such interest is absent and co-operation fails to exist.

Improvement of Breeds.

An interest in the improvement of breeds of live stock is becoming aroused among farmers, by pointing out the advantages of animals bred for special purpose and for special markets, over those general purpose types which are discriminated against. This interest is being stimulated also by the reflection of the good work already done among dairy animals. In this field of work we find considerable difficulty in locating desirable individuals for the farmer who is prepared to improve the type of animals which he feeds or breeds. Several breeders have agreed to increase their herds of pure bred animals in order that this demand may be supplied from within the State.

In the contemplated organization of work along animal industry lines under the State Board of Agriculture, it is hoped that provision will be made for the maintenance of suitable lists ofhigh-class animals which are available through purchase or exchange. By such

measures desirable animals may be secured for breeding purposes within the State, that are now secured from outside sources. As a stimulus to better breeding, an effort is being made to have large photographs of desirable types of animals displayed over the State in public places for improving our live stock.

Feeding and Management.

Without in anyway minimizing the necessity or curtailing the efforts for promoting the introduction of pure-bred sires into the breeds of Maryland one very important fact must be kept in view, viz: that permanent improvement of live stock rests fundamentally upon better knowledge and practice in feeding and management of animals. Until there is proper appreciation of the necessity for better knowledge and better practices in sanitation, feeding and housing of animals, it is unwise to advocate generally the purchase of pure-bred animals. Animal industry extension is being conducted with this condition constantly in mind, and educational work is being done at every opportunity along the lines of proper feeding, management and sanitation.

Dr. S. S. Buckley further reports a summary of his work as follows:

Number lectures given under Project No. 7	7
Total attendance at lectures	631
Number counties visited	15
Number breeding demonstrations started	3
Number Hog Cholera demonstrations	19
Number visits made to farmers with county agents	89
Number agricultural fairs attended, including International Live Stock Exposition in the interest of Animal Industry	5

It is believed that good progress has been made in launching this important work of the Service in the State.

DAIRY EXTENSION WORK.

The dairy project has been continued as heretofore reported, in cooperation with the Bureau of Animal Industry. The project is supported by State and Federal Funds. Mr. G. E. Wolcott devotes whole time to work.

Silos.

Encouragement in the building of silos through demonstrations has been continued. A new type of wood-hoop silo for Maryland has been recommended to farmers who wish a durable silo at a comparatively low cost. Silos, 8 feet x 24 feet, have been built under the supervision of the specialist, at a cost less than $100. Many concrete silos have been built and their cost has been reduced.

City Milk Supply.

There has been considerable agitation throughout the State regarding the character of milk furnished to the cities. At Cumberland the city officials and the dairymen were in a controversy as to the per cent. of fat milk should contain. At a joint meeting the characteristics of the different breeds were explained and matters were adjusted. Difficulties regarding price paid for milk, grades of milk, conditions, etc., have been agitated in Baltimore and Washington. The position of the specialists, agents and Service has been that we would give any information that was desired and obtainable, but the Service has not attempted to interfere in the fixing of price to be paid by distributors, consumers, etc. That feature has been left to the organized dairymen and the city organization to adjust. It is gratifying to note that the dairymen shipping milk into Baltimore have been granted an increase of 2 cents per gallon by the distributors. This will give encouragement to the industry. In this connection there is much interest being shown in organization among dairymen, and it is believed that much good for the industry will develop in the closer contact that will result.

Cow-Testing Associations.

Much time of this specialist has been devoted toward promoting cow-testing associations. Interest in the work has steadily grown for the past two years. Farmers seem to realize that they should have more knowledge as to the production of individuals in the herd, and admit that the regular visit of the tester is the only way to obtain a complete set of records. New associations are organized on a basis of $1.50 per cow. All associations are practically self-supporting, except the one in Talbot County.

List of Cow-Testing Associations.

First Maryland Cow-Testing Association,
First Harford County Dairy Improvement Association,
Second Harford County Cow-Testing Association,
Carroll County Cow-Testing Association,
Talbot County Cow-Testing Association,
Queen Anne Cow-Testing Association,
Kent County Cow-Testing Association,
Gaithersburg-Germantown Cow-Testing Association.

Sufficient members have signed to start two new associations as soon as testers can be located. One in Montgomery County and one at Mt. Airy, Howard County. Four of the above organizations have been organized this year.

The following is a summary of the specialist's work:

Total number of farms visited	521
Farm visits with county agents	286
Total number of meetings addressed	24
Total attendance	1,956
Number movable schools conducted	4
Total attendance	547

Horticultural Extension Work.

This project is supported by Federal and State Funds. Mr. S. B. Shaw devotes whole time to the work. The project provides for giving instruction to growers in the selection and layout of orchard sites, the planting and pruning of trees, the system of cultivation to be practiced, the application of suitable spray material and the thinning, harvesting and packing of fruit. Demonstrations in commercial orchards, home orchards and home gardens are to be conducted through the county agents. Similar work in small fruits and truck crops is also conducted.

Permanent Demonstrations.

Permanent demonstrations are in progress in nine counties of the State. In most instances the work has not been under way sufficient time to make a noticeable showing; as an illustration, the result of the first year's work in a home orchard in Talbot County indicates the value of developing the home orchards. This orchard consisting of about an acre, had been practically abandoned to a hog lot. Old apple and peach trees appeared to be in the last stages of their existence and the owner had given up all hopes of ever realizing anything from them in the way of a fruit crop. Acting upon the advice of the county agent and specialist, steps were taken to completely renovate the orchard. As a result, after deducting all expenses, the grower cleared $100.00 from an inter crop in the orchard and, in addition, sufficient fruit was raised for canning and home use during the season. The owner states that the past season was the first since owning the property that his family have had what they actually needed for home consumption. Similar demonstrations are being conducted on a commercial scale.

Field Meeting Demonstrations.

Work of this nature consisted in conducting pruning, spraying, planting and fruit-packing demonstrations in company with the county agents in the orchard or at packing houses. The growers of the community are invited to attend and take part in the demonstration.

Special interest has centered in the grading and packing work, with the view of introducing desirable grading machines, and giving in-

struction regarding the "New Maryland Apple Grading and Packing Law." Mr. Shaw reports a summary of his work as follows:

Total number of demonstrations conducted	85
Visits made to demonstrators, exclusive of demonstration meetings	18
Visits made to growers, exclusive of demonstrators or demonstration meetings	84
Number persons attending demonstrations	428
Number miscellaneous meetings attended	25
Number lectures given	45

Rural Organization Extension Work.

This project during the fiscal year ending June 30, 1916, was supported by Federal and State Funds. During the present fiscal year it was supported from general extension funds, exclusive of Smith-Lever. Prof. F. B. Bomberger and C. S. Richardson devote as much time to the work as their duties will permit.

The project is an important one and deserves the whole time of at least one specialist. Even under the above conditions the specialists have been of immeasurable assistance to the county agents and to the Service as a whole. In addition to making addresses and attending conferences for the promotion of rural organization, much follow-up work has been done by the way of correspondence. Constitutions and By-Laws have been furnished for a number of organizations created as a result of addresses and conferences. Plans of work have been provided for several organizations in order to make their work interesting to the members and to connect the work of the organization with the economic and social life of the community.

Following the success of the organization of the Montgomery Community Conference, plans have been prepared for the establishment of similar federations of existing organizations in other counties of the State. Active steps have been taken toward this end in Anne Arundel and Harford counties. In many communities of the State the subject of organization for social and economic benefit is under consideration and it is anticipated that a number of new organizations will be formed in the near future. In the field of marketing, the progress has not been so marked. The most conspicuous achievement has been the organization of the Western Maryland Seed Potato Growers' Association. The object of this organization is to grow seed potatoes under mountain conditions prevailing in the counties in the extreme western part of the State. Through the organization the growers are able to produce the seed potatoes under standard regulations, to inspect the product and market it under standard marketing requirements. It is believed that a new industry will develop within the State as a result of the organization of this associa-

tion. There is a large field for a whole-time specialist in organization with special reference to marketing. The development of farm land credit opens up a new field of activity for the specialist in charge of organization.

Prof. F. B. Bomberger reports:

Total number of addresses delivered	35
Total number of conferences in rural communities	20

Professor Richardson reports:

Total number of addresses delivered	20

As a result of the work of the past two years in all parts of the State the rural population is becoming awake to the desirability of organization as the most effective means of promoting both economical and social conditions in the country.

Rural Engineering Extension Work.

This project during the fiscal year ending June 30, 1916, was supported by Federal Smith-Lever Funds. The work is now being supported from general extension funds. Professors T. H. Taliaferro, Harry Gwinner and Myron Creese devoted such time to the subject as their college duties would permit. The aim of the project is to give instructions, and aid farmers through the county agents in conducting demonstrations in the use and adaptability of rural engineering operations on the farm. Many requests have come to the Service which have been taken care of by these specialists. Problems on drainage, water systems for spraying, installation of farm water supply and sewerage, use of concrete tile, septic tanks, plans for barns, water tanks, construction of roads, landscape, lightning protection, lighting systems, etc., have been presented by county agents and farmers for solving. The specialists have made several trips in the State to investigate these inquiries.

A sewerage disposal system, suitable for farm use, has been designed and constructed at the college as a demonstration.

A bulletin outlining in detail the method of construction and cost is being prepared.

It is hoped that in the near future funds will permit employing a whole-time specialist for this important work. There is constantly an increasing demand for expert knowledge in the many phases of rural architecture, drainage, roads, water supply and sanitation in the development of agriculture in the State.

Plant Disease Extension Work.

This project was partly supported by Federal and State Smith-Lever Funds, during the fiscal year ending June 30, 1916. It is now wholly supported from general extension funds.

The project provides for conducting demonstrations in the control of brown rot on peaches, tomato and potato blight. The demonstrations conducted for the control of brown rot and scab on peaches were very successful. The specialist superintended the application of self-boiled lime sulphur. All demonstrations were visited three or more times. In only one case, that of the Carmen variety, which ripened during a wet season, was there loss due to brown rot and scab. In all cases scab was readily controlled. In some cases check trees showed as high as 90 per cent. to 100 per cent. of scab, and the sprayed trees nearby, less than 10 per cent. scab.

The work in the control of tomato blight in the field was not so successful. Through the efforts of the specialist and county agents a large number of tomato growers were induced to spray tomato plants in the bed with Pyrox or Bordeaux and Arsenate of Lead, producing good results. A number of the spraying demonstrations in the field were conducted. In one case, the crop of tomatoes was increased 20 per cent. over the unsprayed. In many cases difficulty was experienced in inducing growers to spray the plants after they had grown large. It has been decided to conduct a very complete series of experiments and demonstrations next year in a section of the State where tomatoes are largely grown, to determine as carefully as possible the most practical means of spraying, to combat the disease. Maryland produces nearly half of the tomato pack of the country. There is usually a severe loss from blight. It is planned to have Prof. C. E. Temple devote his whole time to this one project the coming season.

In order to meet the demand of growers and county agents for pruning and spraying demonstrations during the rush season in early spring, Professor Temple was delegated to aid Professor Shaw in the work under Project No. 10. This was at a season which did not interfere with the work of his project.

Potato Work.

The principal work of the specialist in controlling diseases on potatoes has been made to demonstrate to the growers of the section its adaptability to produce seed potatoes for other parts of the State. Specifications were prepared for the inspection and certification of seed potatoes. As reported in the Organization Project, an association of potato growers has been formed, and the work of this specialist in the inspection of the fields, etc., has resulted in producing a splendid crop of potatoes for those growers who co-operated in the work. Professor Temple also aided in the Boys' Potato Club Work by preparing a series of papers on the Essentials of Potato Production, Control of Diseases, etc.

Miscellaneous Work.

The specialist has delivered a number of lectures on diseases affecting our economic crops. Also a number of visits have been made

to growers for the purpose of giving advice on the control of orchard and truck crop diseases. Some special work in introducing strains of cabbage seed resistant to cabbage yellows, as a demonstration to growers, has proved successful. Identification of diseased specimens, correspondence and regular office work has taken much time of the specialist.

Professor Temple reports the following summary of his work:

Peach spraying demonstrations for control of brown rot, scab, etc.

Number of demonstrations	12
Number of trees, approximate	30,400
Number counties represented	8

Other spraying demonstrations in connection with project.

Number of demonstrations	8
Number in attendance (Pruning demonstrations)	148
Number demonstrations	28
Number in attendance	296
Number public talks and lectures	20
Number in attendance	1,475
Trips to give advice	49

Special Spraying Demonstrations.

For sometime past Mr. W. C. Travers, whose principal work is inspection of orchards and nursery trees, has devoted as much time as possible each season in conducting a few special demonstrations on the control of brown rot on peaches, and the diseases and insect pests in selected orchards. His work has been conducted mainly in sections of the State where there has been no county agent employed. In conducting these demonstrations Mr. Travers has closely supervised the work, the cost and profit of the whole demonstration being carefully recorded.

As an illustration, the orchard of R. B. Homer, Pooles Island, serves to show the results of a practical demonstration in this work. The owner had been unable prior to the past year to more than make expenses.

Orchard contained 8,000 trees, of peach.	
Cost of spraying, including material, freight and labor	$2,983.91
Number of baskets picked	17,393.00
Net profit to grower	$6,921.82

This demonstration has shown the practical results in controlling brown rot, cost of spraying and the net profit. Other demonstrations conducted by Mr. Travers were equally successful. It is this character of demonstration work that it is the aim of the Service to conduct.

Farm Management—Extension Work.

This project for the fiscal year ending June 30, 1916, was supported from Federal Smith-Lever Funds. Prof. W. T. L. Taliaferro devoted part time to Farm Management and Prof. H. T. Harrison devoted as much time to Farm Accounting as his other duties would permit. The object was the dissemination of information and conducting demonstrations in Farm Management, Crop Rotations, Soil Building, Farm Accounting and allied subjects, included in the general term Farm Management.

In preparing the project it was planned to have Professor Taliaferro devote his whole time to the work, but later, conditions were such that he was only able to devote part time to the project. Professor Taliaferro reports having visited many farms for the purpose of inspecting the soil conditions and planning a definite system of soil improvement. In response to county agents' requests, Professor Taliaferro has made a general survey of conditions and advised as to the general farm practice for communities. Different rotations for a series of years on various farms is being carried out under the county agent. The specialist has assisted in movable school work and otherwise aided in the general extension work by delivering addresses and aiding farmers in those counties which have had no county agents. Professor Taliaferro has made surveys and devised rotations, has given specific advice on twelve farms and visited many others with county agents. He has continued the work this fall but is not being supported from Extension Funds. Professor Harrison has aided, where possible, in Farm Accounting. He has met the requests of county agents and visited farmers who were willing to open up accounts. There has been very little demand for this work, yet, it is most important. I hope that we may be able to have several demonstrations in Farm Accounting in progress during the coming year. No direct Extension funds are being devoted to these phases of work during the present fiscal year.

Poultry Extension Work

Project No. 9 for the fiscal year ending June 30, 1916, supported by Federal Smith-Lever funds provided for extension work in the improvement of the poultry industry. Mr. C. L. Opperman was to devote as much time as his other duties would permit. There are great possibilities for the development of the poultry industry in Maryland, and it is hoped that we may be able to secure a whole-time specialist for the work. He assisted in movable school work, conducted some demonstrations, and delivered addresses on Poultry Raising.

Negro Demonstration Work.

On account of the large negro population in some parts of this State it was thought wise to inaugurate some direct demonstration

work among the negro farmers in the lower part of the Eastern Shore. The project was approved May 1st, 1916, and Louis H. Martin was employed to devote whole time to the work, principally in the four counties, Somerset, Worcester, Wicomico and Dorchester. The project is supported by State and Federal funds. The headquarters of the local agent are at Princess Anne Academy, the colored institution, which is a branch of the State College. The object of the project is to conduct practical demonstrations, so as to instruct colored farmers in better farm management, the raising of crops, production of live stock, etc. Local agent, Martin, assists the county agents in the respective counties. On account of starting the work late in the season, it has only been possible for the local agent to organize his work for the coming season by interesting the negro farmers and arranging for demonstrations. He has been of much assistance by aiding in the control of hog cholera, promoting local exhibits by colored farmers and aiding in the study of agriculture in the rural colored schools. He has also aided in the agricultural work at public meetings and otherwise at the Princess Anne Academy. Much interest is being shown in the work among the colored people and it is hoped that this special provision for negro work will be a means of bettering the farming conditions among these people.

Movable Schools.

This project was supported by Federal Smith-Lever funds for the year ending June 30, 1916. During the present year it is supported from General Extension funds. On account of conditions in the State and the crowded work of the specialists only a limited amount of movable school work was conducted during the year. There are many communities which desire this character of instruction. These schools, or neighborhood short courses, serve to carry the college short courses in any particular subject to the farmer or the homemaker. Only two subjects are given at any one course, which generally extends for four days at a given place. The instruction work is given in the most practical manner—all work as far as possible being illustrated and demonstrated.

The following Movabe Schools in Agriculture or Home Economics have been held in the State:

January	25	Freeland, Md.
March	3	Silver Spring, Md.
April	5	Piney Grove, Md.
April	8	Flintstone, Md.
April	18	Mitchellsville, Md.
April	27	Princess Anne, Md.
May	9	Lanham, Md.
June	5	Oakland, Md.
February	28	Accokeek, Md.
March	3	Leonardtown, Md.
December	15	Burkittsville, Md.

It is hoped to arrange for the distribution of educational films, through the rural organizations, during the coming year.

Landscape Gardening.

This project has been taken care of from general extension funds, exclusive of Smith-Lever. Mr. B. W. Anspon devoted as much time to the work as his college duties would permit. There is a great demand for assistance and information for the improvement of home grounds, school grounds and municipal institutions. Several school grounds, planted under the supervision of the specialist, are serving as good demonstrations. As a result, many schools are asking for similar help. There is a constant increase in the demand for plans for the home grounds.

Professor Anspon reports the following summary:

Number places visited for study	20
Number blue-prints submitted	9
Number lectures given	10
Number in attendance	480

Correspondence Courses.

The development of the correspondence course work has not been as marked as desired. This has not been due to lack of interest on the part of the people or the field for such work, but the inability of the men who obligated themselves to furnish lessons promptly on the different subjects. It may be stated that all those who co-operated and promised to furnish lessons on courses offered are very crowded with other duties of first importance, and, as a result, delay in furnishing material for these courses offered has resulted. Mr. Wm. M. Hillegeist, in charge of the Correspondence Study work, reports a total of 101 students who have expressed a desire to take up correspondence courses. The delay in receiving lessons has precluded any organized or systematized effort to give them real publicity. It is hoped that many of the courses will be completed in the near future and that the work can be pushed as originally planned. There is no doubt of the field for such instruction for those who cannot leave their farms or homes to take extended work in any particular phase of agriculture.

"Maryland Week."

The annual meetings and exhibitions of the affiliated agricultural associations, under the auspices of the Maryland Agricultural Society, were held in Baltimore, November 14-18, 1916. The 1916 exhibition far surpassed previous ones and much greater interest was manifested in the meeting and show than ever before. The improvement in the quality of exhibits from all parts of the State, the interest and keen competition of the club exhibitors, the attendance of

farmers to the meetings; and demonstrations marks the affair as a most important educational factor in the agricultural progress of the State. "Maryland Week" presents, in many respects, the result of the work of the Service and College in the State. Members of the Service are secretaries of the associations and on them fall the burden of conducting the show and meetings. It is felt, however, that the time is well spent on behalf of the farming interests of the State.

Conclusion.

I have attempted to give in considerable detail the work of the Extension Service as now conducted. It is impossible to show the far-reaching results that this work accomplished in the State. While we fully appreciate our shortcomings, yet, under the existing conditions, it is believed commendable progress has been made. The attitude of the farmers has changed greatly during recent years and even during the past two years, as a whole, the people are now willing to receive advice. Extension work in Maryland presents wonderful possibilities. The people are ready to co-operate in a sane and practical manner. Maryland farmers are looking for results and it will be necessary to emphasize this during the coming year. This means that county agents and specialists will be compelled to do less advisory work and more real systematic demonstrational work with definite records. Plans are now under way to more thoroughly organize the work in the counties and to determine the proper relations between all forces co-operating in the work.

It is hoped that for the coming year the organization for Extension Work will be more clearly understood by all forces and that more effective work will result.

FINANCIAL REPORT.

The Maryland Agricultural Extension Service

In account with

The United States Appropriation Under Smith-Lever Extension Act, 1915-1916.

Dr.	*Smith-Lever Fund.*
To receipts from the Treasurer of the United States, as per appropriations for fiscal year ended June 30, 1916, under Act of Congress approved May 8, 1914 (*Smith-Lever Act*)	$17,746.73

Cr.	*Federal Smith-Lever.*	
By Salaries	$11,882.46	
Labor	286.79	
Printing and distribution of publications.....	514.86	
Stationery and small printing.....	447.70	
Postage, etc.	398.97	
Supplies	176.00	
Library	105.94	
Tools, etc.	53.62	
Furniture and fixtures.....	488.38	
Scientific apparatus, etc.....	537.07	
Traveling expenses	2,748.59	
Balance	106.35	
		$17,746.73

We, the undersigned, duly appointed auditors of the corporation, do hereby certify that we have examined the books and accounts of the Extension Service of Maryland State College for the fiscal year ended June 30, 1916—that we have found the same well kept and properly classified—that the receipts for the year from the Treasurer of the United States were $17,746.73 under the Act of Congress of May 8, 1914, and the corresponding disbursements $17,640.38, leaving a balance of $106.35—that there have been expended as an offset to the Federal Smith-Lever funds, $7,640.38; State funds, $3,043.27; College funds, $8,050; for all of which proper vouchers are on file and have been by us examined and found correct.

And we further certify that the expenditures have been solely for the purposes set forth in the Act of Congress approved May 8, 1914, and in accordance with the terms of said Act.

(Signed) Thos. V. Barb,
Auditor.

(Seal of Institution.)

Attest:
Wirt Harrison,
Custodian.

Examined and approved as correct.

Thos. B. Symons,
Director of Extension Service.

John M. Dennis,
State Treasurer.

EXPENDITURES BY PROJECTS.

ITEMS OF EXPENSE	Total	Administration	Printing and Distribution of Publications	County Agents	Home Economics and Girls' Club Work	Movable Schools and Farmers' Courses	Boys' Club Work	Agronomy	Farm Management	Poultry Husbandry	Dairy Extension	Rural Organization	Demonstrations Commercial Orchards	Demonstrations Plant Disease	Rural Engineering	Animal Industry	Negro Demonstration Work
Salaries	27,587.38	4,078.37		10,485.83	4,187.88		1,208.33	1,049.48	1,199.92	266.00	339.92	400.00	1,850.00	1,900.00	350.00	279.99	41.66
Labor	286.79	205.22		14.07	4.50	18.00							45.00				
Printing and Distribution of Publications	743.25		743.25														
Stationery and Small Printing	647.70	474.90		39.23	24.38		44.76									48.49	15.94
Postage, Telegraph, Telephone, Freight and Express	398.97	275.81		18.32	39.37	12.45	2.14	50.88									
Supplies	176.00				83.12	31.41	13.59	38.47					8.16			1.25	
Library	105.94				78.44		27.50										
Tools, Machinery and Appliances	53.62				24.12	29.50										142.69	107.54
Furniture and Fixtures	488.38	147.05		5.76	85.34												
Scientific Apparatus and Specimens	554.57			171.34	11.35	144.74	24.44	15.60			17.50					169.60	
Traveling Expenses	5351.43	122.64		198.51	846.58	15.60	143.47	456.04	539.49	83.92	1,051.81	203.55	543.41	973.61	84.92	87.88	
Total	36,394.03	5,303.99	743.25	10,933.06	5,385.08	251.70	1,464.23	1,610.47	1,739.41	349.92	1,409.23	603.55	2,446.57	2,873.61	384.92	729.90	165.14

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" "	2, Oct.,	1916,	Relation of Lime to Agriculture.
" "	3, Feb.,	1917,	The Garden.
" "	4, May,	1917,	Federal Farm Loan Act and the Farmer.
" "	5, May,	1917,	Garden Record Book.
" "	6, June,	191[illegible],	What Maryland's Farmer Boys and Girls Can Do to Help the Nation This Summer.

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" "	73, April,	1901,	Suggestions About Combatting the San Jose Scale.
" "	87, Nov.,	1902,	The Periodical Cicada or Seventeen-Year Locust.
" "	119, July,	1907,	Greenhouse Pests in Maryland.
" "	147, Aug.,	1910,	Wheat—Variety Test, Smut and Scab.
" "	149, Dec.,	1910,	The Terrapin Scale.
" "	151, Feb.,	1911,	Fertilizers for Asparagus.
" "	154, June,	1911,	Bee Keeping in Maryland.
" "	155, Aug.,	1911,	Maryland Weeds and Other Harmful Plants.
" "	159, Oct.,	1911,	Peach Culture.
" "	160, Oct.,	1911,	Strawberries.
" "	161, Nov.,	1911,	Treatment for the San Jose Scale and Terrapin Scale Insects.
" "	162, Dec.,	1911,	The Quality of Seed.
" "	163, Jan.,	1912,	Increasing the Durability of Fence Posts.
" "	164, Feb.,	1912,	Lime-Sulfur as a Summer Spray.
" "	165, Feb.,	1912,	Boys' Corn Growing Contest.
" "	168, July,	1912,	By-Product Feeds.
" "	169, Aug.,	1912,	Cow Testing Associations.
" "	170, Oct.,	1912,	The Maryland Seed Law.
" "	171, Dec.,	1912,	Poultry Notes.
" "	172, Jan.,	1913,	Irish Potato Investigations.
" "	174, Feb.,	1913,	Hog Cholera.
" "	175, Mar.,	1913,	Miscellaneous Insect Pests.
" "	176, April,	1913,	The Peach-Tree Borer.
" "	177, May,	1913,	Open Cow Stable.
" "	178, Oct.,	1913,	Apple Orchard Experiments.
" "	179, Mar.,	1914,	The Quality of Clover Inspected in 1913.
" "	181, Mar.,	1914,	Inexpensive Aids in Producing Sanitary Milk.
" "	183, May,	1914,	Study of Rest Period in Potato Tubers.
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" "	188, Dec.,	1914,	Types and Varieties of Maryland Tobacco.
" "	190, Feb.,	1915,	Tests of Varieties of Corn.
" "	191, Sept.,	1915,	Relation of Catalase and Oxidases to Respiration in Plants.
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" "	195, Mar.,	1916,	Onions.
" "	196, April,	1916,	Methods in Pear and Apple Breeding.
" "	197, July,	1916,	Clover and Grass Seed Inspection in 1914.
" "	198, Oct.,	1916,	Wheat.
" "	199, Dec.,	1916,	Tests of Stable Manure, Commercial Fertilizers and Crimson Clover for Vegetable Crops.
" "	200, Jan.,	1917,	Winter Oats, Barley, Spelt and Emmer.
" "	201, Feb.,	1917,	Soybeans.
" "	202, Feb.,	1917,	Timothy Fertilization and Culture.
" "	203, Mar.,	1917,	Agricultural Seed Inspected.
" "	204, Mar.,	1917,	Variety Tests of Potatoes, Tomatoes, Cabbage and other Vegetables.
" "	205, April,	1917,	Greenhouse Fumigation.

EXPENDITURES BY PROJECTS.

ITEMS OF EXPENSE	Total	Administration	Printing and Distribution of Publications	County Agents	Home Economics and Girls' Club Work	Movable Schools and Farmers' Courses	Boys' Club Work	Agronomy	Farm Management	Poultry Husbandry	Dairy Extension	Rural Organization	Demonstrations Commercial Orchards	Demonstrations Plant Disease	Rural Engineering	Animal Industry	Negro Demonstration Work
Salaries	27,587.38	4,078.37		10,485.83	4,187.88		1,208.33	1,049.48	1,199.92	266.00	339.92	400.00	1,850.00	1,900.00	320.00	279.99	41.66
Labor	286.79	205.22		14.07	4.50	18.00							45.00				
Printing and Distribution of Publications	743.25		743.25														
Stationery and Small Printing	647.70	474.90		39.23	24.38		44.76									48.49	15.94
Postage, Telegraph, Telephone, Freight and Express	398.97	275.81		18.32	39.37	12.45	2.14	50.88									
Supplies	176.00				83.12	31.41	13.59	38.47					8.16			1.25	
Library	105.94				78.44		27.50										
Tools, Machinery and Appliances	53.62				24.12	29.50											
Furniture and Fixtures	488.38	147.05		5.76	85.34											142.69	107.54
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